



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/608,657

06/30/2000

Fulvio Arecco

10676-0057-25

1321

7590

03/30/2005

Barton E Showalter Esq  
BAKER BOTTS LLP  
Suite 600  
2001 Ross Avenue  
Dallas, TX 75201-2980

EXAMINER

KIM, DAVID S

ART UNIT

PAPER NUMBER

2633

DATE MAILED: 03/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No. **UK**

09/608,657

Applicant(s)

ARECCO ET AL.

Examiner

David S. Kim

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6-10, 13 and 16-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 6, 13 and 22-24 is/are rejected.
- 7) ☒ Claim(s) 2, 3, 7-10 and 16-21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### Claim Objections

1. Applicant's compliance with the objection to claim 6 in the previous Office Action (mailed on 17 September 2004) is noted and appreciated. The amendment to claim 6 obviated the previous objection. Accordingly, the objection is withdrawn.

2. **Claim 24** is objected to because of the following informalities:

In line 1, "claim 14" is used where -- claim 13 -- may be intended.

Appropriate correction is required.

### Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. **Claims 1, 6, 13, and 22-24** are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for many of the couplings and connections claimed therein, does not reasonably provide enablement for all of the couplings and connections claimed therein. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims. Claims 1, 6, and 13 appear to be directed to at least Fig. 6, but all the claimed couplings and connections do not seem to properly correspond to at least Fig. 6. Similarly, claims 22-24 appear to be directed to at least Fig. 3, but all the claimed couplings and connections do not seem to properly correspond to at least Fig. 3. Such discrepancies indicate a lack in the scope of enablement required to use the invention, as presently claimed.

Consider the following suggested amendments as potential avenues for overcoming these rejections under 35 U.S.C. 112.

Art Unit: 2633

(claim 1) ~~the communication system includes an optical switch unit that~~ each of the plurality of nodes includes a plurality of transmitting and receiving transponders, and

wherein the plurality of transmitting transponders includes

a first transmitting transponder optically coupled to the first optical carrier and configured to modulate a signal at the first wavelength,

a second transmitting transponder optically coupled to the first optical carrier and configured to modulate a signal at a second wavelength, and

a third transmitting transponder optically coupled to a second optical carrier and configured to modulate a signal at the first wavelength,

the plurality of receiving transponders including

a first receiving transponder optically coupled to the ~~first~~ second optical carrier and configured to demodulate a signal having the first wavelength,

a second receiving transponder optically coupled to the ~~first~~ second optical carrier and configured to demodulate a signal having the second wavelength,

a third receiving transponder optically coupled to the ~~second~~ first optical carrier and configured to demodulate a signal having the second wavelength, and

wherein, under the normal condition, optical switches in an optical switch unit are configured

to connect an optical transmitter to the first transmitting transponder ~~and to the third transmitting transponder,~~

to connect the first receiving transponder to the third transmitting transponder,

to connect the second receiving transponder to an optical receiver, and

Art Unit: 2633

to connect the third receiving transponder ~~to an optical receiver and~~ to the second transmitting transponder.

**(claim 6)** ~~the optical ring network includes an optical switch unit that~~ each of the nodes includes a plurality of transmitting and receiving transponders, and wherein the plurality of transmitting transponders includes

a first transmitting transponder optically coupled to the first optical carrier and configured to modulate a signal at the first wavelength,

a second transmitting transponder optically coupled to the first optical carrier and configured to modulate a signal at a second wavelength, and

a third transmitting transponder optically coupled to a second optical carrier and configured to modulate a signal at the first wavelength,

the plurality of receiving transponders including

a first receiving transponder optically coupled to the ~~first~~ second optical carrier and configured to demodulate a signal having the first wavelength,

a second receiving transponder optically coupled to the ~~first~~ second optical carrier and configured to demodulate a signal having the second wavelength,

a third receiving transponder optically coupled to the ~~second~~ first optical carrier and configured to demodulate a signal having the second wavelength, and

wherein, under the normal condition, optical switches in an optical switch unit are configured

to connect an optical transmitter to the first transmitting transponder ~~and to the third transmitting transponder,~~

to connect the first receiving transponder to the third transmitting transponder,

Art Unit: 2633

to connect the second receiving transponder to an optical receiver, and  
to connect the third receiving transponder to an optical receiver and to  
the second transmitting transponder.

**(claim 13)** wherein the plurality of transmitting transponders includes

a first transmitting transponder optically coupled to the first optical  
carrier and configured to modulate a signal at the first wavelength,

a second transmitting transponder optically coupled to the first optical  
carrier and configured to modulate a signal at a second wavelength, and

a third transmitting transponder optically coupled to a second optical  
carrier and configured to modulate a signal at the first wavelength,

the plurality of receiving transponders including

a first receiving transponder optically coupled to the ~~first~~ second optical  
carrier and configured to demodulate a signal having the first wavelength,

a second receiving transponder optically coupled to the ~~first~~ second  
optical carrier and configured to demodulate a signal having the second  
wavelength,

a third receiving transponder optically coupled to the ~~second~~ first optical  
carrier and configured to demodulate a signal having the second wavelength, and

wherein, under the normal condition, the optical switches are configured

to connect an optical transmitter to the first transmitting transponder ~~and~~  
~~to the third transmitting transponder,~~

to connect the first receiving transponder to the third transmitting  
transponder,

to connect the second receiving transponder to the optical receiver, and

Art Unit: 2633

to connect the third receiving transponder ~~to the optical receiver and to~~  
the second transmitting transponder.

**(claims 22-24)** during normal condition, the optical switches being configured

to connect the first receiving transponder to the third transmitting  
transponder ~~and to the other receiver,~~

to connect the fourth receiving transponder to the other receiver, and

to connect the other optical transmitter to the second transmitting  
transponder ~~and to the fourth transmitting transponder.~~

**Allowable Subject Matter**

5. **Claims 1, 6, 13, and 22-24** would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 1<sup>st</sup> paragraph, set forth in this Office action.

6. **Claims 2-3, 7-10, and 16-21** are objected to as being dependent upon a rejected base claim.

**Conclusion**

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Arecco is cited to show related usage and placement of transponders and optical switches.

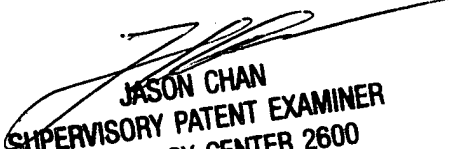
Any inquiry concerning this communication or earlier communications from the examiner should be directed to David S. Kim whose telephone number is 571-272-3033. The examiner can normally be reached on Mon.-Fri. 9 AM to 5 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on 571-272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2633

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DSK

  
JASON CHAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600